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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,079	06/25/2003	Leo Zhaoqing Liu	Rhodia.02036 us	6545

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DANN, DORFMAN, HERRELL & SKILLMAN
1601 MARKET STREET
SUITE 2400
PHILADELPHIA, PA 19103-2307

EXAMINER	
WHITE, EVERETT NMN	

ART UNIT	PAPER NUMBER
1623	

DATE MAILED: 11/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/607,079	LIU ET AL.	
	Examiner	Art Unit	
	Everett White	1623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 August 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *21-37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *21-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 June 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. The amendment filed August 21, 2006 has been received, entered and carefully considered. The amendment affects the instant application accordingly:

(A) Claim 38 has been canceled; Claims 1-20 were previously canceled;
(B) Claims 29--37 have been amended;
(C) Comments regarding Office Action have been provided drawn to:
  (I) 112, 2nd paragraph rejection, which has been withdrawn;
  (II) 112, 1st paragraph rejection, which has been withdrawn;
  (III) 102(b) rejection, which has been maintained for the reasons of record;
  (IV) 103(a) rejection, which has been maintained for the reasons of record.

2. Claims 21-37 are pending in the case.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 29-34 stand rejected under 35 U.S.C. 102(b) as being anticipated by Garnett et al (US Patent No. 3,522,158, already of record) for the reasons set forth on page 3 of the Office Action mailed February 23, 2005.

5. Applicant's arguments filed August 21, 2006 have been fully considered but they are not persuasive. Applicants argue that the rejection of the claims as been anticipated by the Garnett et al patent should be withdrawn because the Garnett et al patent does not disclose a grafted polysaccharide that has a molecular weight lower than the molecular weight of the ungrafted polysaccharide. This argument is not persuasive since the text in Claim 29, the independent claim, which recites "the grafted polysaccharide having a molecular weight lower than the molecular weight of the ungrafted polysaccharide" is based on a process limitation. Applicants are reminded that process limitations cannot impart patentability to a product that is not patentably distinguished over the prior art. *In re Thorpe et al.* (CAFC 1985), supra; *In re Dike*

(CCPA 1968) 394 F2d 584, 157 USPQ 581; *Tri-Wall Containers, Inc.* v. *United States et al.* (Ct Cls 1969) 408 F2d 748, 161 USPQ 116; *In re Brown et al.* (CCPA 1972) 450 F2d 531, 173 USPQ 685; *Ex parte Edwards et al.* (BPAI 1986) 231 USPQ 981. With regard to the claim language that "said copolymer being dispersible in water", Applicants are reminded that a difference in intended use cannot render a claimed composition novel. Note In re Tuominen, 213 USPQ 89 (CCPA, 1982); *In re Pearson*, 494 F2d 1399; 181 USPQ 641 (CCPA, 1974); and *In re Hack* 114 USPQ 161. Accordingly, the rejection of Claims 29-34 under 35 U.S.C. 102(b) as being anticipated by Garnett et al patent is maintained for the reasons of record.

6. Claims 29, 35 and 36 stand rejected under 35 U.S.C. 102(b) as being anticipated by Restaino et al (US Patent No. 3,461,052, already of record) for the reasons disclosed on pages 3 and 4 of the Office Action mailed February 23, 2005.

7. Applicant's arguments filed August 21, 2006 have been fully considered but they are not persuasive. Applicants argue that the rejection of the claims as been anticipated by the Restaino et al patent should be withdrawn because the Restaino et al patent does not disclose a grafted polysaccharide that has a molecular weight lower than the molecular weight of the ungrafted polysaccharide. This argument is not persuasive since the text in Claim 29, the independent claim, which recites "the grafted polysaccharide having a molecular weight lower than the molecular weight of the ungrafted polysaccharide" is based on a process limitation. Applicants are reminded that process limitations cannot impart patentability to a product that is not patentably distinguished over the prior art. *In re Thorpe et al.* (CAFC 1985), supra; *In re Dike* (CCPA 1968) 394 F2d 584, 157 USPQ 581; *Tri-Wall Containers, Inc.* v. *United States et al.* (Ct Cls 1969) 408 F2d 748, 161 USPQ 116; *In re Brown et al.* (CCPA 1972) 450 F2d 531, 173 USPQ 685; *Ex parte Edwards et al.* (BPAI 1986) 231 USPQ 981. Accordingly, the rejection of Claims 29, 35 and 36 under 35 U.S.C. 102(b) as being anticipated by Restaino et al patent is maintained for the reasons of record.

8. Claims 29 and 37 stand rejected under 35 U.S.C. 102(b) as being anticipated by Chuang et al (US Patent No. 4,831,097, already of record) for the reasons disclosed on pages 3 and 4 of the Office Action mailed February 23, 2005.

9. Applicant's arguments filed August 21, 2006 have been fully considered but they are not persuasive. Applicants argue that the rejection of the claims as been anticipated by the Chuang et al patent should be withdrawn because the Chuang et al patent does not disclose a grafted polysaccharide that has a molecular weight lower than the molecular weight of the ungrafted polysaccharide. This argument is not persuasive since the text in Claim 29, the independent claim, which recites "the grafted polysaccharide having a molecular weight lower than the molecular weight of the ungrafted polysaccharide" is based on a process limitation. Applicants are reminded that process limitations cannot impart patentability to a product that is not patentably distinguished over the prior art. *In re Thorpe et al.* (CAFC 1985), supra; *In re Dike* (CCPA 1968) 394 F2d 584, 157 USPQ 581; *Tri-Wall Containers, Inc.* v. *United States et al.* (Ct Cls 1969) 408 F2d 748, 161 USPQ 116; *In re Brown et al.* (CCPA 1972) 450 F2d 531, 173 USPQ 685; *Ex parte Edwards et al.* (BPAI 1986) 231 USPQ 981. Accordingly, the rejection of Claims 29 and 37 under 35 U.S.C. 102(b) as being anticipated by Chuang et al patent is maintained for the reasons of record.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims 21-28 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Restaino et al (US Patent No. 3,461,052) in view of Jost et al (US Patent No. 5,223,171) for the reasons disclosed on pages 6 and 7 of the Office Action dated April 17, 2006.

12. Applicant's arguments filed August 21, 2006 have been fully considered but they are not persuasive. Applicants argue against the rejection on the ground that one combining the teaching of the Jost et al patent with the teaching of the Restaino et al patent would be led by Jost et al to use radiation to produce a product that is biodegradable, i.e., degraded, and not a product that is depolymerized. This argument is not persuasive since the term "bidegradable" used in the Jost patent is not a description of a process step. Biodegradable is only a description of the final product, which indicates that the product is not harmful to the environment. The Jost et al patent is basically cited to show that polysaccharides comprising grafted unsaturated monomers of molecular weight that is less than 700,000 Daltons is well known in the art. It is lightly that the grafted polysaccharides of the instant claims are also biodegradable, particular those grafted polysaccharides disclosed in the instant specification that are useful in food applications and liquid feed supplements (see page 5, lines 8 and 10 of the instant specification). Accordingly, the rejection of Claims 21-28 under 35 U.S.C. 103(a) as being unpatentable over the Restaino et al patent in view of Jost et al patent is maintained for the reasons of record.

Summary

13. All the pending claims are rejected.

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Examiner's Telephone Number, Fax Number, and Other Information

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Everett White whose telephone number is 571-272-0660. The examiner can normally be reached on 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shaojia A. Jiang can be reached on 571-272-0627. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

E. White

10/31/06

Shaojia A. Jiang
Supervisory Primary Examiner
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